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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,861	10/19/2001	Guillaume Brouard	PHFR 000112	4948
24737	7590	03/21/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			CHU, DAVID H	
			ART UNIT	PAPER NUMBER
			2628	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/082,861	Applicant(s) BROUARD ET AL.	
	Examiner David H. Chu	Art Unit 2672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on October 19, 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/19/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1-2</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.
2. The oath or declaration is defective because:
3. The office has received the letter from applicant stating submission of the properly signed Oath or Declaration. However, there is no indication of the actual Oath or Declaration form with the proper signature. Submission of the properly signed Oath or Declaration is requested.

### ***Specification***

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### ***Arrangement of the Specification***

5. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer

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program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

8. The applicant's claim of both an apparatus and the method steps of using the apparatus is indefinite.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 9 is rejected under 35 U.S.C. 101 because:**

10. The claimed invention is directed to non-statutory subject matter.
11. The claim is directed to neither a “process” nor a “machine,” but rather embraces or overlaps two different statutory classes of invention.

**Claim 10 is rejected under 35 U.S.C. 101 because:**

12. The claimed invention is directed to non-statutory subject matter. Claim 10 recites a computer program per se. Computer programs per se, not stored on a computer readable medium, are abstract ideas. Computer programs per se are not capable of performing any function (See MPEP 2106).
13. It is suggested that the claim be amended to recite, “A computer program product stored in computer readable media and executed by the computer for composing a scene content from decode object frames...”

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**15. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Rajan PG PUB Document No. 2001/0000962.**

16. Note with respect to claim 1, Rajan teaches:

A method of composing a scene content from digital video data streams containing video objects, said method comprising:

A decoding step for generating decoded object frames from said digital video data streams, and; [0051]

A rendering step for composing intermediate-composed frames in a composition buffer (FIG.1, 126... 136 & [0060]) from said decoded object frames, characterized in that said method also comprises; [0077] [0079]

A scaling step applied to said intermediate-composed frames for generating output frames constituting scene content. [0077]

17. Note with respect to claim 5, Rajan teaches:

18. A device for composing a scene content from digital video data streams containing video objects, said device comprising:

19. Decoding means (Content Decoders, [0051]) for providing decoded object frames from said digital video data streams, and;
20. Rendering means (Presentation Engine, [0077] [0079]) for composing intermediate-composed frames in a composition buffer from said decoded object frames, characterized in that said device also comprises;
21. Scaling means (Presentation Engine, [0077]) applied to said intermediate-composed frames for generating output frames constituting scene content.

***Claim Rejections - 35 USC § 103***

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. **Claims 2, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajan as applied to claim 1 above, and further in view of Ezer et al. U.S. Patent No. 6,275,239, and applicant's admitted prior art.**

24. Note with respect to claims 2 and 6, Rajan does not explicitly teach:

25. A method of composing a scene content as claimed in claim 1, characterized in that it comprises:

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26. A partitioning step for identifying non-extensive data manipulation steps,
27. A partitioning step for identifying extensive data manipulation steps,
28. Said method being designed to be executed by means of a signal processor and a signal co-processor which perform synchronized and parallel processing steps for creating simultaneously current and future output frames from said intermediate-composed frames, the signal processor being dedicated to said non-extensive data manipulation steps, and the signal co-processor being dedicated to said extensive data manipulation steps.
29. However, Ezer et al. teaches the use of a media coprocessor 102 that contain multiple processors for performing 3D graphics, video and audio functions in addition to a CPU 101, best shown in FIG. 1 (col. 3, line 27 - col. 4, line 35).
30. Further, the applicant admits that the processing means of a signal processor (SP) and signal co-processor (SCP) are well known by those skilled in the art for performing non-extensive data manipulation tasks and extensive data manipulation tasks respectively (Specification, pg5, line15-18).
31. To partition the two steps is inherent for a device/method that contains multiple processors carrying out different processes.
32. Therefore, it would have been obvious to one of an ordinary skill in the art to apply the media coprocessor teachings of Ezer et al. to the teachings admitted in prior art by the applicant to carry out multiple tasks, because this will allow efficient and faster processing of multiple tasks simultaneously.



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33. Note with respect to claim 10, Rajan does not expressly teach:

34. A computer program product for a device for composing a scene content from decoded object frames, comprising a set of instructions which, when loaded into said device for composing, causes said device for composing to carry out the method as claimed in claim 1.

35. However, Rajan teaches a present invention that relates to a method and apparatus for composing and presenting multimedia video programs using the MPEG-4 standard [0040].

36. Further, Rajan teaches a general architecture for a multimedia receiver terminal [0041].

37. It is well known in the art for a receiver terminal to have a processor to carry out the relevant tasks; wherein a set of instructions (computer program) supervises said processor.

38. Therefore, it would have been obvious to one of an ordinary skill in the art to apply a computer program to the multimedia receiver terminal teachings of Rajan, because it would be impractical to carry out the complex task recited by the applicant without a processor and a computer program that instructs it.

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**Claims 3-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajan, further in view of Ezer et al., and admitted prior art as applied to claims 2 and 6 above, and further in view of Foley ("Computer Graphics: Principles and Practice").**

39. Note with respect to claims 3 and 7, Rajan teaches, as described above with respect to claims 1 and 5, the steps of decoding, rendering and scaling to be concurrent [0071].

40. However, Rajan does not expressly teach:

41. A method of composing a scene content as claimed in claim 2, characterized in that the scaling step of a current intermediate-composed frame is designed to be performed by the signal co-processor while the decoding step which generates decoded object frames used for the composition of the future intermediate-composed frame is being performed simultaneously by the signal processor.

42. Foley teaches that it is well known in the art to apply a Pipeline system to speed computations through concurrency. Further, Foley teaches that the stages of a Pipeline can be assigned to separate hardware units (pg877, ch18.5).

43. The combination of the teachings of having concurrent steps of decoding, rendering and scaling by Rajan, and the pipeline teachings of Foley, result in the establishment of having separate processors in a Pipeline system carrying out the different tasks of "scaling" and "decoding" as recited by the applicant.

44. Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to apply the Pipeline system teachings of Foley to the concurrent steps of Rajan, because this will result in faster computation of processes.

45. Note with respect to claims 4 and 8, Rajan teaches the use of a decoding buffer 133 (FIG. 1). For the decoding step being "limited to decoding a maximum number of object frames used for composition" is inherent, as the size of the buffer is the determining factor that sets the number of maximum frames.

**Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalluri et al. U.S. Patent No. 6,934,660, and further in view of Rajan.**

46. Note with respect to claim 9, Kalluri et al. teaches:

47. A set top box designed for composing a scene content from digital video data streams encoded according to the MPEG-4 standard and carrying out a method as claimed in claim 1. (col. 2, line 54-67 & col. 5, line 32-37).

48. However, Kalluri et al does not expressly teach:

49. A set top box designed for composing a scene content from digital video data streams encoded according to the MPEG-4 standard and carrying out a method as claimed in claim 1.

50. Rajan teaches the method of carrying out the steps in claim 1 as described above.

51. Therefore, it would have been obvious to one of an ordinary skill in the art to apply the teachings of Rajan discussed above with respect to claim 1, to the set top box teachings of Kalluri, because this allow the set top box to more efficiently decode, render and scale objects.

### ***Conclusion***

52. Wee et al. U.S. Patent No. 6970510, teaches a method for downstream editing of compressed video.

53. Bezine et al. PGPUB Document No. 2004/0075670, teaches a method and system for receiving interactive dynamic overlays through a data stream and displaying it over a video content.

54. Dureau et al. U.S. Patent No. 6539545, teaches an interactive television system and method for simultaneous transmission and rendering of multiple encoded video streams

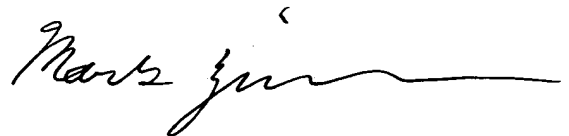
55. Hoch et al. PGPUB Document No. 2002/0152462, teaches a method and apparatus for a frame work for structured overlay of real time graphics

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Chu whose telephone number is (571) 272-8079. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3.15.2006  
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